Baker Manock & Jensen PC
ATTORNEYS AT LAW

Loren J. Harlow
Attorney at law
lharlow@bakermanock.com
Fig Garden Financial Center
5260 North Palm Avenue
Fourth Floor
Fresno, California 93704
Tel: 559.432.5400
Fax: 559.432.5620
www.bakermanock.com

January 3, 2017

VIA ELECTRONIC MAIL
Mr. Lonnie Wass, Supervising Engineer
California Regional Water Quality Control Board
Central Valley Region
1685 E Street
Fresno, CA. 93706

Attn: Mr. Jeff Pyle

Re: Comments on Tentative Waste Discharge Requirements and Cease and Desist Order

Dear Mr. Wass:

On behalf of Harris Ranch Beef Company (Harris Ranch), we are submitting comments pursuant to the Water Boards' November 22, 2016 Notice of Tentative Waste Discharge Requirements (WDRs) and Cease and Desist Order (CDO) for Harris Ranch's Selma facility.

Harris Ranch submitted a Report of Waste Discharge (RWD) in November 2015 that identified significant modifications and improvements to its waste water treatment and land reuse facilities including new land acquisition.

As indentified in the WDRs findings, upgradient groundwater is degraded and exceeds water quality objectives for nitrates due to prior land uses. The WDRs groundwater limitations recognize the upgradient impacts and require that Harris Ranch's treatment and reuse not statistically increase concentrations of nitrate as nitrogen, E.C. and/or TDS (constituents that exceed water quality objectives due to prior upgradient land uses) in groundwater beneath and downgradient as compared to upgradient monitoring well MW-2 and limit increase in other constituents to water quality objectives.

The following are Harris Ranch comments on the Tentative WDRs and CDO. We have provided suggested revisions and comment where appropriate. The suggested revisions and comments are primarily to clarify the WDRs Groundwater Limitations as applied and referenced within the WDRs and CDO.

I. Waste Discharge Requirements

Waste Discharge-Findings:

39. *Water Code section 60224 empowers the ~~Discharger~~ a District created under the Water Replenish Act to take any action needed for protection and preservation of underlying groundwater supplies including:*
    - *The prevention of contaminants from entering groundwater supplies;*
    - *The removal of contaminants from groundwater supplies;*
    - *The locating and characterizing of contaminants which may enter the groundwater supplies;*
    - *The identification of parties responsible for contamination of groundwater; and*
    - *The performance of engineering studies.*

Comment: The Water Code empowers a District created under Sections 60000 et seq. to perform the functions enumerated in Finding 39. Harris Ranch is not a District and does not independently possess these powers.

46. *The existing discharge will likely continue to contribute to the nitrate as nitrogen groundwater contamination observed in downgradient wells MW-1 and MW-4. However, Task 2 of the accompanying CDO R5-2017-XXXX requires the Discharger to construct a wastewater treatment system and for the discharge of wastewater to the land application areas to be at agronomic rates within five years of the adoption of this Order. Nitrate as nitrogen concentrations in Harris Ranch's downgradient groundwater wells will likely continue to be higher than the nitrate as nitrogen concentrations in MW-2 or the new upgradient well for some time, and would place Harris Ranch in violation with any recommended groundwater quality objectives. To ensure that the trends of nitrate as nitrogen and salts in all wells are closely monitored and evaluated, Task 3a and 3b of the CDO requires the Discharger to assess the horizontal and vertical extent of the impact from the historical discharge of beef processing wastewater to the land application areas and to submit a technical report that describes the findings. Task 3c of the CDO requires the submittal of an annual report documenting the progress ~~and the end goal of complying with water quality objectives~~ in meeting the Groundwater Limitations as defined in the Order.. Should the monitoring indicate it will take longer than 10 years from the adoption of this Order for the groundwater to meet the Groundwater Limitations of this Order, Task 3d of the CDO requires the Discharger to submit a work plan with a compliance schedule for implementing additional measures to meet the Groundwater Limitations of this Order, ~~and the applicable water quality objectives~~. To evaluate the trends in groundwater concentrations, this Order will require quarterly sampling and an intra-well analysis of the data to determine if the discharge is ~~continuing to contribute to an exceedance of the groundwater quality objectives, which in this scenario is the upgradient groundwater quality~~ complying with the Groundwater Limitations.*

Comment: As indicated above and within the WDRs, upgradient groundwater exceeds water quality objectives for nitrogen due to prior land uses. The Groundwater Limitations of the WDRs require that Harris

Ranch does not statistically increase concentrations of nitrate as nitrogen, E.C. and/or TDS as compared to upgradient monitoring well MW-2 and limits other constituents to water quality objectives. These suggested revisions are proposed to clarify Tasks required within the CDO and remove ambiguity with the term "the applicable water quality objectives".

71. *Constituents of concern that, when discharged to the clay-lined facultative and unlined evaporation/percolation ponds, and/or the land application areas, have the potential to cause degradation of high quality waters include, in part, organics, nutrients, and salts.*

a. Nitrogen. The discharge has contributed to an exceedance of the water quality objectives for nitrate as nitrogen downgradient of the effluent storage ponds and land application areas. Most of the nitrogen in the process wastewater is present as TKN, which can readily mineralize and convert to nitrate (with some loss via ammonia volatilization) in the land application areas. Upgradient groundwater quality is poor (averaging 25 mg/L) with respect to nitrate as nitrogen and exceeds the primary MCL of 10 mg/L in MW-2. The poor quality of the upgradient groundwater is likely due to past and present uses of the surrounding land areas. It is not natural background groundwater quality, but it is the quality of the groundwater as it flows under the Harris Ranch property. However, since 2013 downgradient wells MW-1 and MW-4 have average nitrate as nitrogen results of 63 and 74 mg/L, respectively. The average nitrate as nitrogen result in 2015 from MW-4 was 86 mg/L, with the 4th Quarter 2015 result being 97 mg/L. The average nitrate as nitrogen result from MW-1 of 64 mg/L is more than twice the result from upgradient MW-2 and more than six times the MCL of 10 mg/L. The 2015 average nitrate as nitrogen result of 84 mg/L from MW-4 is more than 3 times the result from upgradient MW-2 and more than eight times the MCL of 10 mg/L.

In order to ensure that the discharge will not result in further nitrate as nitrogen degradation, this Order requires that nitrogen loading to the land application areas be at reasonable agronomic rates, and requires the Discharger to prepare a Nutrient and Wastewater Management Plan. The Central Valley Water Board expects that application of wastewater and fertilizers at reasonable agronomic rates for nitrogen will preclude further degradation/pollution of groundwater for nitrate as nitrogen. The proposed upgrades to the wastewater treatment system will maximize nitrogen removal before the discharge of the wastewater to the land application areas, and the expanded land application areas and proposed cropping patterns will minimize the potential for nitrate to migrate to groundwater. CDO R5-2017-XXXX includes Task 2 and 3 that include compliance schedules that require Harris Ranch to comply with the effluent limitations and evaluate if groundwater remediation alternatives are necessary to ensure that Harris Ranch facility does not cause a statistically significant increase in groundwater constituent concentrations over existing upgradient groundwater values for those constituent that exceed water quality objectives.

Comment: Task 3. d of the CDO requires after periodic monitoring that it will take longer than 10 years from adoption of the WDRs to meet groundwater limitations, a workplan must be submitted to implement additional remedial alternatives. The finding does not reflect the actual requirement of the CDO. The proposed changes reflect that alternatives may be required pursuant to the CDO.

80. *This Order is consistent with the Anti-Degradation Policy since: (a) The Discharger must implement BPTC to minimize degradation; (b) Limited degradation is allowed by this Order, but the Order in combination with CDO R5-2017-XXXX is anticipated to improve groundwater quality and ~~will be protective of future beneficial uses of groundwater and~~ will not result in constituent concentrations statistically greater than existing upgradient groundwater quality or water quality objectives whichever is greater; and (c) The limited degradation is of maximum benefit to people of the State.*

Comment: As noted within the WDRs findings, existing upgradient groundwater exceeds water quality objectives and is polluted for nitrate. Harris Ranch treatment and reuse of its waste water will result in an improvement in groundwater quality. However, the current finding as worded does not reflect that even in Harris Ranch's absence, the current pollution will continue.

Waste Discharge- Orders

D. Groundwater Limitations

Release of waste constituents from any treatment unit, delivery system, storage areas, or Land Application Area associated with the Plant shall not cause or contribute to groundwater containing concentrations of constituents as identified below.

1. Contain nitrate as nitrogen, EC, and/or TDS in concentrations statistically greater than the upgradient groundwater quality as measured in the Harris Ranch upgradient groundwater monitoring well MW-2. MW-2 will be replaced with a new upgradient well proposed near the northeast corner of the new 100-acre land application area, at which time the new well or wells will replace MW-2 as a background well/wells.

2. Contain waste constituents in concentrations in excess of the water quality objectives for constituents identified in Title 22 (excluding nitrate as nitrogen, EC, and TDS).

3. Contain taste or odor-producing constituents, toxic substances, or any other constituents in concentrations excluding nitrogen, EC and/or TDS that cause nuisance or adversely affect beneficial uses.

Comment: As noted in the WDRs findings, existing upgradient groundwater exceeds water quality objectives for some constituents and is polluted for nitrate. To provide clarity, it is Harris Ranch's understanding that the WDRs Groundwater Limitations require that Harris Ranch's treatment and reuse not statistically increase concentrations of nitrate as nitrogen, E.C. and/or TDS (constituents that exceed water quality objectives due to prior upgradient land uses) in groundwater beneath and downgradient as compared to upgradient monitoring well MW-2 and limit increases in other constituents to water quality objectives. The modification and inclusion of "excluding nitrogen, EC and/or TDS" in D. 3 provides consistency with D.1.

II. Cease & Desist Order

Cease & Desist- Findings

22. *Comparing the results from the Harris Ranch downgradient monitoring wells to upgradient and regional groundwater results indicates that while water quality is also affected by an unknown and offsite source, the discharge of beef processing wastewater to the land application areas has contributed to the polluted/degraded groundwater with nitrate as nitrogen, EC, and TDS.*

Comment: Existing upgradient groundwater exceeds water quality objectives. Harris Ranch discharge may have contributed to the exceedance but the upgradient groundwater exceeds water quality objectives for nitrogen and its is already polluted.

Cease & Desist- Orders

3. The Discharger shall comply with WDRs Order R5-2017-XXXX, Groundwater Limitations D.1 and, D.2 in accordance with the following compliance schedule:

Task	*Task Description*	*Due date*
a.	*Submit a work plan and time schedule that identifies the methods proposed for assessing the horizontal and vertical extent of elevated EC, TDS, and nitrate as nitrogen concentrations in groundwater beneath and downgradient of the Harris Ranch Land Application Areas.*	*(1 year from the adoption of this Order)*
b.	*Submit a technical report that describes the horizontal and vertical extent of elevated EC, TDS, and nitrate as nitrogen degradation/pollution in groundwater beneath and downgradient of the Harris Ranch Land Application Areas and proposes an appropriate course of action. The report is subject to Executive Officer approval.*	*In accordance with the approved schedule, but by no later than (4 years from adoption of this Order)*
c.	*Annually, submit a technical report analyzing groundwater quality and progress towards complying with the Groundwater Limitations of this Order. ~~and moving towards the end goal of meeting applicable water quality objectives.~~*	*Annual progress report (by 1 February of each year)*

d.	*If the periodic monitoring required in Subsection c, above, indicates that it will take longer than 10 years from the adoption of this Order for groundwater to meet the Groundwater Limitations of this Order ~~and the applicable water quality objectives~~, the Discharger shall submit a work plan with a compliance schedule for implementing additional measures to meet the Groundwater Limitations of this Order ~~and the applicable water quality objectives~~. The proposed work plan and compliance schedule shall be subject to Executive Officer approval and may be incorporated into future Board Orders.*	*As required by the Executive Office*

Comment: Upgradient groundwater exceeds water quality objectives for nitrogen due to prior land uses. The WDRs Groundwater Limitations require that Harris Ranch's treatment and reuse not statistically increase concentrations of nitrate as nitrogen, E.C. and/or TDS (constituents that exceed water quality objectives due to prior upgradient land uses) in groundwater beneath and downgradient as compared to upgradient monitoring well MW-2 and limit increases in other constituents to water quality objectives. These suggested revisions are proposed to clarify the Tasks required to comply with the Groundwater Limitations and remove ambiguity with the term "the applicable water quality objectives".

III. Information Sheet

Comment: As the information sheet is incorporated as a part of the proposed WDRs, it should be revised to reflect the comments addressed above. The following are suggested changes and revisions:

At page 4, third full paragraph:

To ensure that the trends of nitrate as nitrogen and salts in all wells are closely monitored and evaluated, Task 3a and 3b of the accompanying Cease and Desist Order (CDO) requires the Discharger to assess the horizontal and vertical extent of the impact from the discharge of beef processing wastewater to the land application areas and to submit a technical report that describes the findings. Task 3c of the CDO requires the submittal of an annual report documenting the progress ~~and the end goal of complying with water quality objectives~~ towards complying with Groundwater Limitations of this Order. Should the monitoring indicate it will take longer than 10 years from the adoption of this Order for the groundwater to meet the Groundwater Limitations of this Order, Task 3d of the CDO requires the Discharger to submit a work plan with a compliance schedule for implementing additional measures to meet the Groundwater Limitations of this Order. ~~and the applicable water quality objectives~~.

Comment: The suggested revisions correspond to and provide consistency with the proposed revisions for the WDRs and CDO.

At page 4, fourth full paragraph:

To evaluate the trends in groundwater concentrations, this Order will require quarterly sampling and an intra-well analysis of the data to determine if the discharge is ~~continuing to contribute to an exceedance of the groundwater quality objectives, which in this scenario is the upgradient groundwater quality~~ complying with Groundwater Limitations of this Order.

Comment: The suggested revisions correspond to and provide consistency with the proposed revisions for the WDRs and CDO.

At page 8, First full paragraph:

3. The proposed Cease and Desist Order includes Task 3 that provides a time schedule for the Discharger to comply with WDRs Order R5-2017-XXXX, Groundwater Limitations D.1 and, D.2 in accordance with the following compliance schedule:

Task	*Task Description*	*Due date*
a.	*Submit a work plan and time schedule that identifies the methods proposed for assessing the horizontal and vertical extent of elevated EC, TDS, and nitrate as nitrogen concentrations in groundwater beneath and downgradient of the Harris Ranch Land Application Areas.*	*(1 year from the adoption of this Order)*
b.	*Submit a technical report that describes the horizontal and vertical extent of elevated EC, TDS, and nitrate as nitrogen degradation/pollution in groundwater beneath and downgradient of the Harris Ranch Land Application Areas and proposes an appropriate course of action. The report is subject to Executive Officer approval.*	*In accordance with the approved schedule, but by no later than (4 years from adoption of this Order)*
c.	*Annually, submit a technical report analyzing groundwater quality and progress towards complying with the Groundwater Limitations of this Order. ~~and moving towards the end goal of meeting applicable water quality objectives~~.*	*Annual progress report (by 1 February of each year)*

d.	*If the periodic monitoring required in Subsection c, above, indicates that it will take longer than 10 years from the adoption of this Order for groundwater to meet the Groundwater Limitations of this Order ~~and the applicable water quality objectives~~, the Discharger shall submit a work plan with a compliance schedule for implementing additional measures to meet the Groundwater Limitations of this Order ~~and applicable water quality objectives~~. The proposed work plan and compliance schedule shall be subject to Executive Officer approval and may be incorporated into future Board Orders.*	***As required by the Executive Office***

Comment: The suggested revisions correspond to and provide consistency with the proposed revisions for the WDRs and CDO.

Thank you for the opportunity to provide comments on the Tentative WDRs and CDO. We appreciate you and your staff's efforts in preparation of these tentative orders.

If you have any questions, please contact me.

Very truly yours,

Loren J. Harlow
BAKER MANOCK & JENSEN, PC

CC: Mr. Michael Oliver, Harris Ranch
Mr. Mike Casey, Harris Ranch
Mr. Michael Smith, Harris Ranch
Dr. Jerry Teng, Provost & Pritchard
Mr. Donald Ikemiya, Provost & Pritchard

LJH:TLW